

Vacuum Cleaning Tool Having An Air Turbine with Stabilizing Air Stream

Abstract

A vacuum cleaning tool has a housing having a turbine chamber and a bottom plate. A working tool is rotatably supported in the housing. An air turbine for driving the working tool is arranged in the turbine chamber and has axial end faces defining a gap relative to the chamber sidewalls. A turbine chamber wall has a first intake window and at least one second intake window. The first intake window supplies a driving suction air stream to the peripheral turbine surface on a first side of a plane that extends through the turbine axis. The second intake window supplies a partial suction air stream to the turbine chamber that enters the turbine chamber on a second side of the plane extending through the turbine axis. The second intake window overlaps at least partially at least one gap and the partial suction air stream flows into the gap.